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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/817,361	03/20/2001	Natalia I. Afanassieva	AFAN-003	2342
28661	7590	12/30/2005	EXAMINER	
SIERRA PATENT GROUP, LTD. 1657 Hwy 395, Suite 202 Minden, NV 89423			SMITH, RUTH S	
			ART UNIT	PAPER NUMBER
			3737	
DATE MAILED: 12/30/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/817,361

Applicant(s)

AFANASSIEVA, NATALIA I.

Examiner

Ruth S. Smith

Art Unit

3737

**– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 November 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                         |                                                                             |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                             | 6) <input type="checkbox"/> Other: _____                                    |

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Rava et al (6,690,966). Rava et al disclose a system for analysis of an in vivo biological sample using infrared attenuated total reflectance measurements. The infrared source is a middle infrared radiation source which is used with a Fourier transform spectrometer (column 12, lines 61-63). An optical fiber is coupled to an unclad interchangeable fiberoptic probe (see figures 16a-b, column 13, lines 14-43). The fiberoptic probe is configured to be in direct contact with the sample. The radiation used is within the ranges set forth in the claims. The peaks of the spectrum are analyzed to compare healthy tissue with diseased tissue. The fiberoptic probe can be configured as a percutaneous probe. The use of such a probe, for example to example the GI tract, would be considered to be a non-invasive probe in that it does not break the skin. It is well recognized in the art that the term "non-invasive" can refer to a procedure not involving penetration (as by surgery or hypodermic needle) of the skin of the intact organism. However, if applicant argues that a probe placed in a body via a naturally occurring orifice would be invasive, the use of a

non-invasive probe to contact any surface in question that is accessible via a non-invasive probe would have been obvious to one skilled in the art in view of the teachings of Rava et al to use ATR to diagnose surface diseases such as superficial cancers of the bladder and GI tract using a surface probe.

Claims 9,10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rava et al. Rava et al disclose a system for analysis of an in vivo biological sample using infrared attenuated total reflectance measurements. The infrared source is a middle infrared radiation source which is used with a Fourier transform spectrometer (column 12, lines 61-63). An optical fiber is coupled to an unclad interchangeable fiberoptic probe (see figures 16a-b, column 13, lines 14-43). The fiberoptic probe is configured to be in direct contact with the sample. The radiation used is within the ranges set forth in the claims. The fiberoptic probe can be configured as a percutaneous probe. The peaks of the spectrum are analyzed to compare healthy tissue with diseased tissue. It is well known in the art to examine various features of the optical spectrum obtained such as intensity of peaks and compare intensities using ratios in order to determine the presence/absence of abnormal tissue. In the absence of any showing of criticality or unexpected results, the specific spectrum comparison used would have been an obvious design choice of known equivalents in the art.

### ***Response to Arguments***

Applicant's arguments filed November 9, 2005 have been fully considered but they are not persuasive. Applicant's arguments are not understood in that while Rava et al sets forth in-vitro testing examples, Rava et al is clearly directed to in-vivo testing of tissue (see column 2, lines 64-67, column 3, lines 1-15, column 5, line 49, column 6, lines 65-67-column 7, line 1, column 12, line 11, column 13, lines 18-20, lines 36-38, column 19, line 21). Furthermore, it is believed that the use of a catheter to contact the sample in a naturally occurring orifice involves the use of a non-invasive procedure. Rava et al further disclose the use of ATR methods using mid-IR radiation.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth S. Smith whose telephone number is 571-272-4745. The examiner can normally be reached on M-F 7:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ruth S. Smith  
Primary Examiner  
Art Unit 3737